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ABSTRACT

Based on the view that because kindergarten is caught between early childhood education and compulsory public education, the year is often overlooked as an important time for learning. This paper aims to mobilize interest in kindergarten as an educational issue ripe for research, debate, and policy action. The paper begins by briefly reviewing kindergarten history. Next, the provision of kindergarten is discussed using various state and federal data sources, with exploration of issues such as length of the kindergarten day, compulsory attendance, uncertainty about entrance age, and state differences. Current policy issues are presented, including kindergarten mandates, entrance age, curriculum and instructional methods, screening and assessment, delaying kindergarten entrance, teacher shortages, and the links between prekindergarten and kindergarten. Finally, suggestions for future research are made, as well as recommendations for state and federal policy action. Appended are lessons from New Mexico's full-day kindergarten campaign based on an interview with the executive director. (Contains 59 references.) (KB)

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KINDERGARTEN: THE OVERLOOKED SCHOOL YEAR

Sara Vecchiotti

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WORKING PAPER SERIES

KINDERGARTEN: THE OVERLOOKED SCHOOL YEAR

Sara Vecchiotti

October 2001

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The purpose of the Working Paper Series is to share ideas and potential solutions about how all American families can meet the basic requirements for the healthy development of their children.

Views expressed in this paper are those of the author. Email Sara Vecchiotti at: guest6@ffcd.org

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Executive Summary

Americans commonly understand children's publicly funded education to begin with the kindergarten year and to end at the twelfth grade. To the contrary, kindergarten is not mandated in all States. Of States that offer kindergarten, only a handful require attendance. Moreover, the typical kindergarten program runs for only part of the regular school day. Half-day kindergarten itself has not been fully accepted or implemented in the public education system across all fifty States, let alone full-school-day kindergarten. The State or school district in which a five-year-old child resides or the local school that a child attends ultimately determines the extent, and probably the quality, of the kindergarten experience. Therefore, a child's kindergarten experience is highly dependent on local initiative and resources.

A CHILD'S KINDERGARTEN EXPERIENCE IS HIGHLY DEPENDENT ON LOCAL INITIATIVE AND RESOURCES.

Kindergarten serves as many children's introduction to the public education system. It is a time to enhance children's early learning by fostering their love of learning and independence through the teaching of foundational skills and developing knowledge necessary for academic success in the early grades. Considering this important role, it is therefore surprising how often kindergarten is overlooked when educational research and policy agendas are formed. Available data are based primarily on State policies related to the programs offered, the length of the kindergarten day, and attendance requirements. Neither States nor the federal government collect enough systematic data on kindergarten, especially at a school district or individual school level. Existing data sources report differences in the implementation of kindergarten. Thus, the formation of an accurate picture of the availability, utilization, and content of kindergarten programs at a national or State level is limited and should be improved.

IT IS SURPRISING HOW OFTEN KINDERGARTEN IS OVERLOOKED WHEN EDUCATIONAL RESEARCH AND POLICY AGENDAS ARE FORMED.

Policymakers and early educators are focused on establishing or expanding prekindergarten programs, and some aim to create a universal, voluntary system of preschool education. This policy focus often neglects what happens to five-year-olds. As a result, many three- and four-year-olds attend full-school day, full-year

MANY THREE- AND FOUR-YEAR-OLDS ATTEND FULL-SCHOOL DAY, FULL-YEAR PROGRAMS, BUT THEY WILL MOST LIKELY BE IN HALF-DAY PROGRAMS WHEN THEY REACH AGE FIVE.

programs, but they will most likely be in half-day programs when they reach age five. As participation in prekindergarten increases, the relationship between prekindergarten and kindergarten will become a widespread concern. Regular interactions between these programs would promote better continuity in learning and more positive transitions for children than now exist.

Full-school day kindergarten should be a voluntary, universal option available as part of the public education system. Children, teachers, and parents would benefit from full-school-day kindergarten. Children would have more time in an educational environment. Teachers would have time to fully explore instructional topics, to pace instruction according to children's individual needs, and to engage in more teacher-directed work with individual students. Working families would be partially relieved of stress in organizing and maintaining care arrangements during the workday, since fewer arrangements would be required with full-school-day kindergarten. Moreover, full-school-day kindergarten would provide children from low- to middle-income working families with a high-quality, educational experience that their families could not afford to purchase privately.

RECENT NATIONAL STUDIES CONFIRM KINDERGARTEN'S IMPORTANCE TO THE EDUCATIONAL SUCCESS OF YOUNG CHILDREN.

Kindergarten suffers from the middle child syndrome, caught between early childhood education and compulsory public education. As a result, it is often overlooked as an important time for learning. Recent national studies confirm its importance to the educational success of young children. Kindergarten must be included in any effort to promote early education for all children. Kindergarten is unfinished business and deserves our renewed attention.

Introduction

This paper aims to mobilize interest in kindergarten as an educational issue that is ripe for research, debate, and policy action. More research is needed to form of an accurate picture of kindergarten structure and content, utilization, and availability across the United States. More discussion is needed to inform the efforts to address the policy issues surrounding

kindergarten. More action is needed to ensure that strong linkages are established between prekindergarten and kindergarten programs, and that full-school-day kindergarten is available to all children.

To this end, the paper begins by briefly reviewing kindergarten history. Next, the provision of kindergarten[1]--what kindergarten programs States require school districts to offer--- is discussed using various data sources. Current policy issues are briefly presented and include kindergarten mandates, entrance age, curriculum and instructional methods, screening and assessment, delaying kindergarten entrance, teacher shortages, and the links between prekindergarten and kindergarten. Finally, suggestions for future research are made, as well as recommendations for State and federal policy action.

What is Kindergarten?

IN KINDERGARTEN, CHILDREN ARE EXPECTED TO BEGIN TO INTEGRATE THEIR COGNITIVE, SOCIAL, AND PHYSICAL COMPETENCIES TO MEET THE DEMANDS OF A STRUCTURED EDUCATIONAL EXPERIENCE.

Traditionally, kindergarten has been viewed as children's first organized educational experience in a group. In kindergarten, children are expected to begin to integrate their cognitive, social, and physical competencies to meet the demands of a structured educational experience (Early, Pianta & Cox, 1999). Kindergarten is described as setting the stage for subsequent learning and school success, since it aims to provide the foundation for future academic progress (Alexander & Entwisle, 1988).

FOR EVEN MORE CHILDREN THAN BEFORE, KINDERGARTEN IS NOT THE FIRST EDUCATIONAL EXPERIENCE, DUE TO INCREASING PARTICIPATION IN EARLY EDUCATION PROGRAMS.

The traditional view of kindergarten, however, differs from reality in two ways. First, for even more children than before, kindergarten is not the first educational experience, due to increasing participation in early education programs (preschool and child care). Early education programs now fulfill many of the traditional aims of kindergarten, but kindergarten still serves as an important transitional experience for children. Once kindergarten bridged home and formal education. Now it is more likely to bridge early childhood education and formal K-12

[1] This paper does not discuss the provision of kindergarten in terms of State and local funding policies for kindergarten programs. This is a worthwhile topic for future research because financing plays a large role in which kindergarten programs, such as full-day kindergarten, are required by State policy and ultimately implemented by local school districts.

education. Second, many kindergartens no longer aim to foster all areas of children's development, but tend to focus only on academic skills that were once taught in the first grade.

A Brief History of Kindergarten

FROM ITS ORIGINS, THE IMPORTANCE OF KINDERGARTEN TO ENHANCE CHILDREN'S COGNITIVE, PHYSICAL, AND SOCIAL DEVELOPMENT WAS EMPHASIZED.

Kindergarten has a long history.[2] It began in the 1840's in Germany with Friedrich Froebel's idea of shaping young children in a nurturing, educational, protected environment in preparation for entry into the formal educational system; hence the name, "children's garden." From its origins, the importance of kindergarten to enhance children's cognitive, physical, and social development was emphasized. Trained teachers, promoting intellectual curiosity, self-expression and social relations through play and group activities like singing and dancing, taught young children (Brosterman, 1997; Shapiro, 1983). Play consisted of formal, sequenced, stylized, instructional exercises such as arranging wooden blocks in designated patterns (Beatty, 1995).

In 1856, in Watertown, Wisconsin, Margarethe Meyer Schurz[3] opened the first German-speaking kindergarten in America following Froebel's model. In 1860, Elizabeth Peabody, an education advocate, opened the first English-speaking kindergarten in Boston following the Froebelian method of instruction. These first kindergartens tended to serve children from middle- to upper-income families. In the late 1870's, charity or free kindergartens were established primarily in urban areas to serve poor and immigrant children and their families. Some of these early programs adhered to the traditional Froebelian method, while others were American versions that incorporated American songs and traditions and stressed academic skills (Beatty, 1995; Shapiro, 1983).

The first public school kindergartens started in the early 1870's in St. Louis, Missouri, under the leadership of Susan Blow, a teacher, and William Torrey Harris, the superintendent of schools, and served children ages three to six (Shapiro, 1983;

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[2] For detailed accounts of kindergarten history, please see Beatty (1995; 1999), Brosterman (1997), Shapiro (1983), and Wollons (2000).

[3] Margarethe Schurz was a German immigrant and was one of Froebel's specially trained assistants in Germany. She was also married to a prominent German-American politician who was a member of President Lincoln's cabinet (Beatty, 1995).

Beatty, 1995). In order to reduce costs, double sessions -- half-day (3. 5 hours) morning or afternoon sessions sharing materials, teachers, and the classroom itself -- were introduced (Beatty, 1995).

Many private and charity kindergarten programs were incorporated into the public school system during World War I with an aim of socializing or "Americanizing" immigrants to the U.S. and to teach them English (Beatty, 1995; Shapiro, 1983). Due to a shortage of qualified teachers and classrooms during World War II, half-day kindergarten programs became the norm (Oelerich, 1979). The launching of the Russian satellite, Sputnik, heightened the sense that American education was failing, and many kindergarten programs increased their emphasis on academic skills (Shapiro, 1983). In the sixties and seventies, the recognition of the disparity in educational opportunity between affluent and low-income children led to the establishment of early education programs like Head Start aimed at leveling the playing field before kindergarten (Shapiro, 1983).

A National Perspective on Kindergarten

THE EARLY CHILDHOOD LONGITUDINAL STUDY – KINDERGARTEN CLASS OF 1998-1999 INCLUDED A NATIONAL SAMPLE OF 22,000 FIRST-TIME KINDERGARTNERS ACROSS THE NATION.

Recently, the National Center of Education Statistics (NCES) recognized that knowledge regarding kindergarten was limited (West, Denton, Germino-Hausken, 2000). To address this gap, NCES began the Early Childhood Longitudinal Study-Kindergarten Class of 1998-1999 (ECLS-K), which studied 22,000 first-time kindergartners across the nation using interviews/ questionnaires for parents and teachers and direct child assessments. The sample of children was stratified according to race/ethnicity, socio-economic status, and geographic location.

PRIOR TO ENTERING KINDERGARTEN, CHILDREN VARIED IN THEIR SKILL AND KNOWLEDGE LEVELS RELATED TO THEIR ENTRANCE AGE, LEVEL OF MOTHER'S EDUCATION, FAMILY STRUCTURE, PRIMARY LANGUAGE SPOKEN AT HOME, AND RACE-ETHNICITY.

The first ECLS-K report (West, Denton, Germino-Hausken, 2000) showed that prior to entering kindergarten, children varied in their skill and knowledge levels related to their entrance age, level of mother's education, family structure, primary language spoken at home, and race-ethnicity. For example, older children and children whose mothers had a college education performed at higher levels in reading, mathematics, and general knowledge than younger children or children whose mothers had lower levels of education. Parents and teachers reported that all the children generally engaged in prosocial

behavior, yet teachers rated children with at-risk characteristics (mothers with less than a high school education, single parents, or their families do or have received public assistance) as having difficulty in forming friendships and accepting peer ideas. Teachers rated girls and older children as more likely, and children with at-risk characteristics as less likely, to be eager to learn.

WHILE ALL CHILDREN IMPROVE IN GENERAL READING AND MATH SKILLS DURING THE KINDERGARTEN YEAR, SPECIFIC SKILLS GROW AT DIFFERENT RATES.

A subsequent ECLS-K study by West, Denton, and Reaney (2001) analyzed the children's growth in academic skills during the kindergarten year. Findings from this study indicate that while all children improve in general reading and math skills during the kindergarten year, specific skills grow at different rates. For example, older kindergartners were more likely to demonstrate more complex reading skills, such as letter-sound relationships, than younger children in kindergarten. During the kindergarten year, children with at-risk characteristics made gains in basic skills such as letter recognition, counting, and comparing object size. Yet at-risk children were still further behind children with fewer at-risk characteristics, because the latter made greater gains in more sophisticated reading and math skills such as sight-word reading and simple addition and subtraction problems. Therefore, while all children are learning in kindergarten, children are learning different skills and learning at substantially different paces.

AT-RISK CHILDREN WERE STILL FURTHER BEHIND CHILDREN WITH FEWER AT-RISK CHARACTERISTICS, BECAUSE THE LATTER MADE GREATER GAINS IN MORE SOPHISTICATED READING AND MATH SKILLS.

Research on kindergarten is still in its early stages and more research, in addition to the NCES effort, is needed to understand children's development during the kindergarten year. The ECLS-K database serves as a valuable resource for better understanding children's development in kindergarten and what factors influence that development. Since the database is longitudinal and will follow children through the fifth grade, there will also be opportunities to examine the effect of the kindergarten year on subsequent development.

IN CONTRAST TO THE EARLY HISTORY OF KINDERGARTEN SERVING THREE- TO SIX-YEAR OLDS, PROGRAMS NOW SERVE PRIMARILY FIVE-YEAR-OLD CHILDREN.

The Current Provision of Kindergarten: An Unknown

In contrast to the early history of kindergarten serving three- to six-year-olds, programs now serve primarily five-year-old children. There is still a mix of public and private schools offering kindergarten, though in a reversal of past years, public

programs now outnumber private programs[4] (Snyder & Hoffman, 2001). Today, eighty-three percent of private programs are religiously affiliated, while 17 percent are non-sectarian (NCES, 1999). Across the United States, kindergarten classes are half-day, full-school-day, or alternate-day (attend for a full day every other day).

SOME STATES DO NOT MANDATE THE PROVISION OF KINDERGARTEN.

THERE ARE DIFFERENT DEFINITIONS OF THE NUMBER OF HOURS CONSTITUTING A HALF-DAY OR A FULL-SCHOOL-DAY.

Over the years, participation in kindergarten has increased, so that the majority of five-year-old children attend kindergarten in either public or private school programs.[5] However, some States do not mandate the provision of kindergarten. Further, it appears that half-day kindergarten is the program most likely to be required, while full-school-day kindergarten is less likely to be a required option. There are different definitions of the number of hours constituting a half-day or a full-school-day. Few States require compulsory attendance in kindergarten, perhaps reflecting the current uncertainty regarding the appropriate age for the beginning of compulsory education.

QUESTIONS SUCH AS WHETHER OR NOT MOST CHILDREN ATTEND HALF-DAY OR FULL-SCHOOL-DAY PROGRAMS OR HOW SCHOOL DISTRICT POLICIES MAY DIFFER WITHIN AND BETWEEN STATES CANNOT BE DEFINITIVELY ADDRESSED WITH CURRENT DATA.

In general, there is little information collected about kindergarten programs. Furthermore, knowledge of kindergarten programs varies according to which data source and what level of data collection (national, State, school district, local school) is used (see Table 1). As a result, little is known about the extent of kindergarten provision across the States. Questions such as whether or not most children attend half-day or full-school-day programs or how school district policies may differ within and between States cannot be definitively addressed with current data.

Mandated Half-Day or Full-School-Day Kindergarten: Unfinished Business

For the most part, information on kindergarten is limited to State policies governing the provision of kindergarten and is

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[4] In 1999, 2,577,000 five-year-old children were in public kindergartens and 426,000 were in private kindergartens.

[5] In 2000, there were 3,989,000 five-year-old children, 94 percent were enrolled in either kindergarten (78 percent), nursery school (15 percent), first grade (6 percent), and second grade (1percent); 6 percent were not enrolled in any such program (U.S. Census Bureau, 2001). In a NCES, 1998 study of approximately 22,000 kindergarten children, 85 percent attended public school programs and 15 percent attended private school programs, with 55 percent attending full-school-day programs and 45 percent attending half-day programs (West, Denton, Germino-Hausken, 2000).

collected by State Departments of Education. Two sources examining kindergarten are the Council of Chief State School Officer's (CCSSO) *Key State Education Policies on K-12 Education*, 2000 and the National Center for Children in Poverty's (NCCP) recent edition of *Map and Track: State Initiatives for Young Children and Families* (Cauthen, Knitzer, & Ripple, 2000). These reports outline kindergarten policy for each State, including requirements for programs school districts must offer, program duration, and attendance.

Data from CCSSO indicate that ten States require school districts to offer full-school-day programs, 20 States require half-day programs[6], five States require school districts to provide both full-and half-day programs, five States require either full-school-day or half-day programs,[7] and ten States have no specific policy. NCCP data show that nine States require school districts to offer full-school-day programs, 38 States require half-day programs, and three States have no specific policy. Both sources show that half-day kindergarten itself has not been fully accepted or implemented in the public education system across all fifty States, let alone full-school-day kindergarten.

HALF-DAY KINDERGARTEN ITSELF HAS NOT BEEN FULLY ACCEPTED OR IMPLEMENTED IN THE PUBLIC EDUCATION SYSTEM ACROSS ALL FIFTY STATES, LET ALONE FULL-SCHOOL-DAY KINDERGARTEN.

Length of Kindergarten Day: No Common Definition

What constitutes a full-school-day or half-day program, as measured by school day hours, varies across the States. CCSSO data indicate that seven States consider a full-school-day to be 6.0 hours or more (plus Missouri, which allows hours to range from 3.0-7.0). Nine States consider a full-school-day program to be between 5.0 to 5.5 hours, and eight States consider a 2.0-4.5 hour range acceptable for full-school-day programs. For half-day programs, 17 States consider between 2.0 to 2.5 hours to be acceptable and five States consider between 2.75 and 4.0 hours to be adequate. No standard for defining full-school-day or half-day hours exists, thereby making comparisons among States and knowledge-based policymaking difficult.

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[6] This includes Nebraska, which requires 400 hours a year.

[7] It is not clear whether these "and/or" State policies for half and full-day programs mean that every school district and schools within a district must provide both the programs promoting parental choice, or whether only some districts and schools within a district offer both programs or one program.

Attendance: Not Compulsory for Kindergarten

Most States do not have policies requiring kindergarten attendance. The Education Commission of the States (ECS) found that 11 States have policies that mandate kindergarten attendance. According to CCSSO, nine States with half-day programs require attendance and six States with full-school-day programs require attendance. NCCP reports that 13 States require kindergarten attendance (11 of these States require school districts to offer half-day programs and two of these States require school districts to offer full-school-day programs). School officials or truancy officers rarely enforce attendance policies in kindergarten. Based on these sources, more children are required to attend half-day programs than full-school-day programs.

SCHOOL OFFICIALS OR TRUANCY OFFICERS RARELY ENFORCE ATTENDANCE POLICIES IN KINDERGARTEN.

Compulsory Education: Uncertainty About Entrance Age

It is not surprising that compulsory attendance in kindergarten differs across the States since the entrance age to compulsory education varies as well. Further, compulsory school age varies across countries: the United Kingdom's compulsory school age is five while Norway's is seven (Kamerman, 2000). In the United States, kindergarten entrance age is generally around five years (although in some States and historically, four-year-olds may attend), and compulsory attendance age ranges from age five to age eight. ECS data show that two States have a compulsory entrance at age eight, 19 States at age seven, another 19 States at six, and nine States at age five. CCSSO data are similar, with two States having a compulsory school entrance age at eight, 18 States at age seven, 21 States at six, and seven States at age five. This variation may reflect reluctance among States to make kindergarten attendance compulsory, as it is for the rest of public education.[8] This reluctance should be a topic for further exploration, whether it is due to State budgetary concerns, parental preferences, or uncertainty about the appropriate age for the beginning of compulsory education.

IT IS NOT KNOWN WHETHER THE RELUCTANCE AMONG STATES TO MAKE KINDERGARTEN ATTENDANCE COMPULSORY REFLECTS STATE BUDGETARY CONCERNS, PARENTAL PREFERENCES, OR UNCERTAINTY ABOUT THE APPROPRIATE AGE FOR BEGINNING COMPULSORY EDUCATION.

[8] It is also recognized that in many States compulsory attendance is not even required for first grade, making second or third grade the beginning of compulsory education.

Differences among State Reports: Cautions for Interpretation

The differences found in State policies about kindergarten require careful interpretation. Differences may be due to: 1) policy changes since the time of the surveys, 2) different survey questions eliciting different answers, and/or 3) different administrators within the State Departments of Education completing the surveys. The CCSSO and NCCP data on full- and half-day programs and attendance requirements differ in the reported findings (see Table 1). Researchers who collected the CCSSO and NCCP data reported that they relied on respondents within the State Departments of Education, and that no verification occurred. It appears that State administrators in different positions, such as assistant superintendents, directors of early childhood education programs, and research analysts, do not share a common understanding of State kindergarten policy, and therefore did not provide consistent answers to questions. Thus, a clear picture of kindergarten programs in the United States does not emerge.

IT APPEARS THAT STATE ADMINISTRATORS IN DIFFERENT POSITIONS DO NOT SHARE A COMMON UNDERSTANDING OF STATE KINDERGARTEN POLICY.

Moving from the State to local level, school districts and individual schools within a district often provide kindergarten services exceeding the requirements of State policy. For example, even though State policy requires a half-day program, school districts and individual schools may opt to provide full-school day programs or alternate-day programs as well. Little is known about the policy choices and motivations of various districts. To analyze and form an accurate depiction of kindergarten provision across the United States, requires data at a school district or local school level in each State, not just at the State-policy level.

SCHOOL DISTRICTS AND INDIVIDUAL SCHOOLS WITHIN A DISTRICT OFTEN PROVIDE KINDERGARTEN SERVICES EXCEEDING THE REQUIREMENTS OF STATE POLICY.

LITTLE IS KNOWN ABOUT THE POLICY CHOICES AND MOTIVATIONS OF VARIOUS DISTRICTS.

School District and Local School Level: Data Needed

Collecting information about kindergarten at the school district or local school level is needed. National sources such as the National Center for Education Statistics (NCES) and many States generally collect information only about kindergarten enrollment; the distinction between half- and full-school-day programs is rarely made. In response to a list-serve inquiry about kindergarten programs through the National Association of Early Childhood Specialists, State Department of Education

representatives from 14 States replied that they collect information on kindergarten. Only five States (one was not able to share data) made the distinction between full- and half-day programs in data collection; six States did not; and three States did not respond.

In the United States, significant educational policy decisions are made locally within different political and socioeconomic contexts, resulting in the variation in kindergarten programs available at a State and local level. Through inspection of data that a few States shared regarding their provision of full- and half-day programs (see Table 2), the importance of school-district level data in contrast to State-policy level data is demonstrated. For both Illinois and Missouri, CCSSO reported a State policy of offering either full- or half-day programs, and NCCP reported a State policy of only half-day programs. Using school district and school level data in Missouri, full-school-day kindergarten is the most common program implemented in the public schools. In Illinois, slightly more children attend half-day programs than full-school-day programs. According to both the CCSSO and NCCP, Kansas had no explicit State policy regarding kindergarten provision, yet kindergarten has an established presence in Kansas with most schools offering half-day programs and with a recent trend towards offering full-school-day programs. Both data sources also indicated that Connecticut had a State policy of half-day programs, yet there is an even split between the number of children in half-day programs and the number of children in full-school-day or extended day programs. As is often the case, what is reported as State policy may not reflect school district and local school practice. Clearly, relying on State-level reports does not fully capture the extent of kindergarten provision and utilization in school districts in these States. What is needed is more research, using Statewide school district and local school level data, to present a more detailed, accurate picture of kindergarten programs across the States.

OFTEN, WHAT IS REPORTED AS STATE POLICY MAY NOT REFLECT SCHOOL DISTRICT AND LOCAL SCHOOL PRACTICE.

This initial examination of kindergarten programs indicates that, like many public goods in the United States, residency is destiny. What State or school district a five-year-old child resides in or what local school a child attends determines their access to, and extent of their kindergarten experience. The uneven playing field begins with kindergarten, if not before. Within a State, a

INITIAL EXAMINATION OF KINDERGARTEN PROGRAMS INDICATES THAT, LIKE MANY PUBLIC GOODS IN THE UNITED STATES, RESIDENCY IS DESTINY.

IF KINDERGARTEN IS TRULY THE ENTRT POINT INTO THE PUBLIC EDUCATION SYSTEM, AS MOST PERCEIVE IT TO BE, IT IS THE STATE'S RESPONSIBILITY TO ENSURE THAT KINDERGARTEN POLICIES ARE CONSISTENT WITH POLICIES OF THE SUBSEQUENT SCHOOL YEARS.

child in one school district may attend half-day kindergarten for 2.5 hours while another child in a different district attends full-school-day kindergarten for 6.0 hours. If kindergarten is truly the entry point into the public education system, as most perceive it to be, it is the State's responsibility to ensure that kindergarten policies such as availability, length of school day, or attendance are consistent with policies of the subsequent school years (Grades 1-12).

Kindergarten suffers from the middle child syndrome, caught between early education and public education, even though it shares features with both educational levels. Policymakers and legislative bodies alike often overlook kindergarten. Although the kindergarten classroom is affiliated with the public education system at the elementary school level, the diversity in the provision and structure of kindergarten resembles the diverse programs of the early education and care system for preschoolers and infants/toddlers. Yet, as part of the public education system, kindergarten teachers are more highly educated and paid more than teachers in preschool programs (Head Start and community-based programs).

Policy Issues in Kindergarten

A main question for each policy issue regarding kindergarten is posed in this section. Concerns surrounding these issues are briefly presented and summarized. Directions for future research, debate, and policy action are provided, and in some cases, when supported by research, recommendations are offered. Generally, the purpose is to inform future debates not to provide answers to these neglected issues.

The Kindergarten Year: Should It Be Required for All Children?

Kindergarten teachers, principals, parents, advocates, and policy-makers expect that in kindergarten children will learn the basic academic and social skills that prepare them for the demands of first and subsequent grades. Since some States do not mandate the provision of kindergarten, many programs are half-day, and kindergarten attendance is rarely compulsory, this expectation may not consistently be met. This situation has inspired calls for mandated kindergarten to ensure that either kindergarten is

offered, that children are required to attend, or both. Others believe that only the establishment of full-school-day kindergarten programs will meet current and future expectations of the kindergarten year. They believe that expectations of what children should learn in kindergarten will not be fully realized until Statewide, required attendance and/or full-school-day kindergarten is implemented throughout the public school system.

Entrance Age: Should There Be a Uniform Entrance Age?

WIDE AGE SPANS IN CLASSROOMS CAN MAKE IT DIFFICULT FOR TEACHERS TO IMPLEMENT A CURRICULUM THAT ACCOMMODATES CHILDREN'S SUBSTANTIALLY DIFFERENT LEVELS AND PACES OF LEARNING, UNLESS TEACHER EDUCATION PROGRAMS INCLUDE PREPARATION FOR UNGRADED CLASSROOMS.

Across and within States, entrance cut-off ages to kindergarten are not uniform. Cut-off points for entrance ages vary between summer and winter months for five-year-olds.[9] Typically, there is an age span of one year in kindergarten classrooms, with younger children having their date of birth close to the cut-off age (called summer children). In some classrooms, however, in the beginning of the school year children as young as four and as old as six are present. Wide age spans in classrooms can make it difficult for teachers to implement a curriculum that accommodates children's substantially different levels and paces of learning (Shepard & Smith, 1986; NAECS/SDE, 2000), unless more teacher education programs include preparation for ungraded classrooms.

DELAYING ENTRANCE FURTHER WIDENS THE GAP BETWEEN YOUNGER AND OLDER CHILDREN AND HELPS ESTABLISH EXPECTATIONS FOR KINDERGARTEN ACHIEVEMENT BASED ON THE PERFORMANCE OF THE OLDER CHILDREN IN THE CLASS.

Kindergarten Entrance: Should Entrance Be Delayed?

In kindergarten classrooms, there are always younger children and older children, typically with an age span of a year. Delaying entrance further widens the gap between them and helps establish expectations for kindergarten achievement based on the performance of the oldest children in the class (NAECS/SDE, 2000). The emphasis on school readiness has also led many parents and school administrators to expect that children possess basic academic skills (sound-letter relationships, spelling of name, identifying shapes) prior to kindergarten entrance.

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[9] While not compulsory, the most common cut-off age is to be age five by sometime in September (ECS, 2000). Rates of kindergarten participation seem to make kindergarten compulsory attendance a moot issue since most parents want their children to attend kindergarten and it is the rare child who does not attend school by age 6.

EXTRA TIME TO MATURE OR ADDITIONAL EDUCATIONAL EXPERIENCE DOES NOT RESULT IN AN ACADEMIC BOOST. WHILE OLDER CHILDREN DO INITIALLY PERFORM BETTER ACADEMICALLY, THESE POSITIVE OUTCOMES ARE LIMITED AND FADE OUT IN THE EARLY GRADES.

Both schools and parents sometimes delay children's entrance into kindergarten for a year (most likely for summer children), a practice called red-shirting. This practice is based on the belief that some children need extra time to mature, and that older children adjust better to the demands of kindergarten than younger children. Research does not support these practices. Extra time to mature or additional educational experience (e.g. retention or transitional kindergarten) does not result in an academic boost. While older children do initially perform better academically, these positive outcomes are limited and fade out in the early grades (Shepard & Smith, 1989; Shepard & Smith, 1986; Crone & Whitehurst, 1999; Carlton & Winsler, 1999). Retaining children in kindergarten can also negatively affect children's social and emotional development, particularly their sense of self (Shepard & Smith, 1989; Shepard & Smith, 1986).

Curriculum and Instructional Methods: What Is Appropriate?

IN DEVELOPING OR ADOPTING KINDERGARTEN CURRICULA, MANY PROGRAMS TODAY DO NOT USE THE AVAILABLE RESEARCH KNOWLEDGE OF YOUNG CHILDREN'S DEVELOPMENT AND LEARNING.

Professionals disagree about what curriculum content and instructional methods should be used in kindergarten. In developing or adopting kindergarten curricula, many programs today do not use the available research knowledge of young children's development and learning. (NAECS/SDE, 2000). Other concerns impacting curriculum design include differing interpretations of the National Education Goals Panel definition of school readiness (which refers to both the children's and the schools' readiness), and increasing rates of retention in kindergarten (more children are being held back in kindergarten based on their academic and/or social skills) (NAECS/SDE, 2000). Further confusing the debate is that a common terminology to discuss classroom curricula and instruction does not exist, and often the concepts described are framed in opposition to each other. Researchers, early educators, parents, and policymakers use the language of *child-centered* vs. *didactic*, *intellectual skills* vs. *academic skills*, *child-initiated* vs. *teacher-directed*, and *developmentally appropriate practice* vs. *developmentally inappropriate practice*. Within this context, two original purposes of kindergarten -- fostering thinking skills and building basic academic knowledge -- have become sources of conflict as different kindergarten program approaches have been developed favoring one goal over the other.

The approach typically described as child-centered focuses on how children learn in terms of developing children's general thinking, problem solving, and social skills, while the other approach, typically described as didactic, concentrates on what children learn in terms of the acquisition of basic knowledge and skills. The first approach values learning as children actively constructing, reflecting, evaluating, integrating, and applying their knowledge and skills in their daily activities and social interactions. The second approach values learning as children gaining knowledge in reading, math, and writing, as well as mastering basic skills, with a particular emphasis on literacy.

The "child-centered" approach has been criticized as inadequately preparing children for the academic demands of the first grade, underestimating children's competencies, and placing little emphasis on reading. The "didactic" approach has been criticized as promoting the pushdown of the first-grade curriculum into kindergarten, narrowly focusing on "surface" skills and children's performance on specific academic outcomes, and undermining children's motivation to learn.

CONSENSUS ABOUT HOW AND WHAT CHILDREN SHOULD LEARN IN KINDERGARTEN WILL NOT BE REACHED UNTIL A COMMON LANGUAGE IS USED TO PROMOTE SHARED UNDERSTANDING OF THE CONCEPTS INVOLVED.

Consensus about how and what children should learn in kindergarten will not be reached until a common language is used to promote shared understanding of the concepts involved. The greatest challenge lies in developing curriculum content and instructional practices that foster all areas of child development, perhaps blending the approaches described above.

KINDERGARTEN PROGRAMS SHOULD AIM TO ENHANCE CHILDREN'S THINKING, ACADEMIC, AND SOCIAL SKILLS, NOT FOCUS ON ONE AREA TO THE EXCLUSION OF OTHERS.

Kindergarten programs should aim to enhance children's thinking, academic, and social skills, not focus on one area to the exclusion of others. It is also important to consider that other factors impact curriculum design, such as children's prior educational experience and parental preference. Another challenge is to develop instructional practices and design curricula that are sensitive to the influence of culture and language, since kindergartners come from diverse backgrounds, including both immigrant and American-born children.

Screening and Assessment:[10] What Are Appropriate Practices?

CHILDREN LEARN DIFFERENT KNOWLEDGE AND SKILLS AT DIFFERENT RATES. THESE COMPLEXITIES CONTRIBUTE TO THE CONFUSION IN DETERMINING THE APPROPRIATE PURPOSE AND METHODS OF ASSESSMENT IN KINDERGARTEN.

Due to concerns about school accountability and children's achievement, the practice of assessing young children is growing. Assessment of young children is complex because young children's abilities are evolving. Children learn different knowledge and skills at varying rates. These complexities contribute to the confusion in determining the appropriate purpose and methods of assessment in kindergarten. Concerns underlie how and when assessments should be made: to measure individual children's ability or progress, to influence placement and retention decisions, to identify learning differences, to inform instructional planning, or to evaluate outcomes of kindergarten programs. Methodological concerns refer to what form of assessment (such as standardized testing or curriculum-based, performance assessments) should be used to fulfill a particular purpose of assessment. These concerns grew out of the practice of using results *solely* from assessments of children's school readiness skills using norm-referenced, standardized tests, instead of gathering information from various sources and with different instruments (NAECS/SDE, 2000). Assessment practices are important since decisions to delay entrance into kindergarten, place children in developmental or transitional kindergartens, or retain children in kindergarten are made according to assessment results. State and school district policy should reflect assessment practices that use multiple sources of information and allow children to demonstrate their skills in different ways, allowing for variability in skill learning and learning pace, as well as being sensitive to the influence of children's cultural background (NRC, 2000; APA, 1985; 1999).

STUDIES POINT TO SMALLER CLASS SIZE IN THE EARLY GRADES AS A PREDICTOR OF HIGHER STUDENT ACHIEVEMENT IN SUBSEQUENT GRADES.

Kindergarten Class Size: What Is an Optimal Class Size?

Research supports a movement to reduce class size in kindergarten. Studies point to smaller class size in the early grades as a predictor of higher student achievement in subsequent grades (HEROS, 1997; Mosteller, 1995). The ratio

[10] This paper does not allow for a comprehensive discussion of the issues surrounding assessment such as the adequacy of teacher preparation and training in assessment, including social competence in assessment, and appropriate assessment methods for school districts to evaluate their kindergarten programs.

recommended by the National Association of Young Children (NAEYC) is 25 children to two adults (Bredekamp & Copple, 1997), and the National Education Association (NEA) recommends a maximum number of fifteen children in a classroom (NEA, 2000). The ECLS-K database indicates that in 1998, the average kindergarten class size in public schools was 20 students and in private schools it was 18 (NCES, 2000). In public schools, only 15 percent of the classrooms had 15 students or fewer, 85 percent had more than 15 children enrolled, and in private schools 41 percent had class sizes of 15 students or fewer and 59 percent had more than 15 students. Classrooms with less than ten percent "minority" children were more likely to have a class size of 15 or fewer students than classrooms in which 75 percent or more children were "minorities" (NCES, 2000). Thus, some kindergartners are still in large classes. More research is needed to measure the impact of smaller class sizes on child outcomes to better inform policies.

CLASSROOMS WITH LESS THAN TEN PERCENT "MINORITY" CHILDREN WERE MORE LIKELY TO HAVE A CLASS SIZE OF 15 OR FEWER STUDENTS THAN CLASSROOMS IN WHICH 75 PERCENT OR MORE CHILDREN WERE "MINORITIES."

A Common Shortage: What Should Be the Qualifications of Teachers?

The National Association for the Education of Young Children's (NAEYC) professional position is that kindergarten teachers must have a college education with a specialization in early childhood education, and should have completed a supervised teaching experience (Bredekamp & Copple, 1997).[11] Early, Pianta, & Cox (1999) found that 46.5 percent of the public school kindergarten teachers had a master's degree or higher, 78.6 percent had an elementary education certificate (K-6), and 49.6 percent had certification specifically for kindergarten or the early primary grades, with an average of eleven years of teaching experience. Thus, kindergarten teachers typically have appropriate training and education according to current standards, but fewer teachers have specific backgrounds in early childhood education.

KINDERGARTEN TEACHERS TYPICALLY HAVE APPROPRIATE TRAINING AND EDUCATION ACCORDING TO CURRENT STANDARDS, BUT FEWER TEACHERS HAVE SPECIFIC BACKGROUNDS IN EARLY CHILDHOOD EDUCATION.

A shortage of qualified kindergarten teachers has occurred due to the increased efforts to reduce class size or institute full-school-day kindergarten. As a result, schools hire teachers with

[11] This recommendation may conflict with State teacher certification policies that require kindergarten teachers to have the same certification requirements as higher elementary grade teachers and not requirements for specialized training and knowledge for early childhood.

emergency or temporary certification, or certification in areas other than early childhood, or new teachers with little teaching experience to work in kindergartens (personal communication with Zelda LeFrak[12], Carol Gossett[13], and Fred Nathan[14], 2001). Overall, little is known about the prevalence and impact of these and other practices, which research suggests affects the quality of children's experience in kindergarten. Therefore, school officials are faced with the problem of recruiting and retaining suitable teachers, a situation which plagues not only the rest of the public education system in the United States, but other countries as well (OECD, 2001). Efforts should be dedicated to raising the status and salaries of the teaching profession to attract individuals to teach young children.

Transition into and From Kindergarten: Unevaluated Approaches?

EASING TRANSITION FROM HOME AND/OR EARLY EDUCATION PROGRAM INTO KINDERGARTEN IS A CONCERN.

Considering the organizational niche of kindergarten between early childhood education programs and elementary education, easing transition from home and/or early education program into kindergarten is a concern. Research has focused on the difficulties many children have adjusting to the intellectual, behavioral, and social demands of kindergarten programs. Rimm-Kauffman, Pianta, and Cox (2000) surveyed a nationwide sample of kindergarten teachers stratified by school poverty level, minority composition of children, and residential status (urban, rural, and suburban). Teachers reported that while 16 percent of children had multiple difficulties when first entering kindergarten, 46 percent or more of their classroom children had specific problems in kindergarten. The most common problem

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[12] Zelda LeFrak is president of the National Kindergarten Alliance (NKA). NKA is a national organization that convenes national summit meetings to address kindergarten issues and unites State kindergarten associations, as well as assisting in the formation of new State associations. It supports kindergarten teachers, develops teacher leadership, and provides teachers with a national voice. Also, NKA identifies research-based appropriate kindergarten practices to effect positive change for all kindergarten children.

[13] Carol Gossett is president of the California Kindergarten Association (CKA). CKA is a State-based organization that promotes the importance of kindergarten, seeks to advance the professionalism of kindergarten teachers, assists in the development and implementation of developmentally appropriate practices in kindergarten, and enhances communication among teachers, parents, school administrators, and policymakers.

[14] Fred Nathan is Executive Director of Think New Mexico. This organization is more fully discussed in the section *Full School-Day Kindergarten: What Evidence Supports It?* and in Appendix A.

reported was difficulty following directions (46 percent), while lack of academic skills was reported 36 percent of the time. Difficulty with social skills (21 percent) and difficulty working as a group (30 percent) were also frequently reported. Another study indicated that 26 percent of kindergartners change classrooms or schools (does not include changes that occur in the first two weeks of school) during the course of the kindergarten year (Pianta & Early, 2001). Turnover disrupts children's adjustment to kindergarten, both for the child leaving or entering and for those left behind, as well as the work of teachers.

However, little evaluation research is available on effective programs or approaches to ease the transition from home to school or from early education programs to kindergarten to promote continuity in learning (ECS, 2000; Kagan & Neuman, 1998). Common practices used by teachers to help families and children adjust to kindergarten (such as school open houses, classroom visits, and parent-teacher meetings held prior to the start of the school year), are largely unevaluated (ECS, 2000). Prekindergarten programs may also play a role in promoting positive transitions to kindergarten, highlighting the need for good communication between kindergarten and prekindergarten programs, and additional research on the impact of policy and practice.

THE TRANSITION FROM KINDERGARTEN TO FIRST GRADE HAS ALSO RECEIVED LITTLE ATTENTION IN RECENT RESEARCH AND PRACTICE, AND DESERVES RENEWED INTEREST.

The transition from kindergarten to first grade has also received little attention in recent research and practice, and deserves renewed interest (Alexander & Entwisle, 1998). In kindergarten, children typically have circle time, dramatic play, and learning centers (blocks, science, free writing), but in first grade children often have individual desks, subject periods, and more paper-pencil work. Transition concerns and practices primarily revolve around the transition into kindergarten, overshadowing the crucial transition from kindergarten. Since preparation for and success in first-grade relies on kindergarten experience, attention should be devoted to developing practices in kindergarten that ease the transition from kindergarten into the first-grade.

SINCE THE GOAL OF MANY PRESCHOOL PROGRAMS IS TO PROMOTE SCHOOL READINESS, WHAT THEN IS THE ROLE OF KINDERGARTEN?

Little attention has been devoted to the relationship between kindergarten and prekindergarten programs.[15] With increasing participation in prekindergarten programs, kindergarten, for many, is no longer children's first experience in an educational program (NCES, 2000; Mitchell, 2000). Since the goal of many preschool programs is to promote school readiness, what then is the role of kindergarten? Should kindergarten be a more formal educational experience while prekindergarten is more informal? Is the kindergarten curriculum being pushed down into prekindergarten? Curricula can be coordinated to ensure continuity in learning, information about individual child development can be shared, visits to kindergarten classrooms can be arranged, and staff can participate in joint professional development activities (ECS, 2000). Routine, structured relationships should be developed between prekindergarten and kindergarten programs to promote positive transitional experiences for children. This is a particularly difficult challenge since children in a single preschool program often attend kindergarten in numerous schools.

IMPROVING PERFORMANCE IN KINDERGARTEN IS ONLY ONE AREA IN WHICH PREKINDERGARTEN AND KINDERGARTEN INFLUENCE EACH OTHER. OTHER AREAS INCLUDE TRANSITION PRACTICES, CURRICULUM CONTENT, AND PROFESSIONAL DEVELOPMENT OF TEACHERS.

The impact of Georgia's voluntary, universal prekindergarten on kindergarten provides some preliminary information about relationships between the two programs.[16] There is consensus among kindergarten teachers that the children who participated in the voluntary prekindergarten program were better prepared for kindergarten, especially regarding pre-reading, pre-math, and social skills (Henderson, Basile, & Henry, 1999). Improving performance in kindergarten is only one area in which prekindergarten and kindergarten influence each other. Other areas include transition practices, curriculum content, and professional development of teachers.

In Georgia, informal relationships between prekindergarten and kindergarten programs serve to provide children with additional

[15] NCCP reports that 10 States (Arkansas, Connecticut, Delaware, Georgia, Illinois, Maryland, Michigan, New Jersey, New York, and Oregon) require that State-funded prekindergarten or Head Start programs have a plan to help prepare children for transition into kindergarten.

[16] This information was obtained through an interview with Carolyn Trammell, Program Manager of the Georgia Prekindergarten Program at the Georgia Office of School Readiness.

services and to ease the transition into kindergarten. Prekindergarten programs build relationships with local public schools to obtain services for children that are not available in the prekindergarten program, such as referrals for testing to determine special education needs. At the end of the prekindergarten year, various activities occur to promote positive transitions, such as children visiting kindergarten classrooms, kindergarten teachers visiting prekindergartens, and providing parents with transition kits that include puzzles, crayons, magnetic letters, books and suggest summer activities.

PUBLIC SCHOOL PREKINDERGARTEN TEACHERS ARE MORE LIKELY TO SHARE INFORMATION ABOUT CHILDREN WITH PUBLIC SCHOOL KINDERGARTEN TEACHERS THAN PREKINDERGARTEN TEACHERS IN PRIVATE CHILD CARE CENTERS OR HEAD START.

Public school prekindergarten teachers are more likely to share information about children with public school kindergarten teachers than prekindergarten teachers in private child care centers or Head Start. This may be a result of the public school prekindergarten and kindergarten programs sharing the same school building and administrative staff, which allows for easier access and interaction between teachers. Thus, the nature and strength of program interactions vary according to the auspice of the prekindergarten program.

In some public and private prekindergarten programs, parents exert pressure to implement a kindergarten curriculum to enhance the prekindergarten children's academic readiness. The Georgia Office of School Readiness (OSR) and prekindergarten teachers respond by approving and implementing curricula based on appropriate expectations for four-year-old preschoolers. Individual teachers and program administrators work to maintain distinct, appropriate curricula for prekindergarten and kindergarten levels.

In a few counties, prekindergarten and kindergarten teachers participate in joint professional development activities. Teachers plan together for the upcoming school year to help promote continuity in children's learning. A few counties have also instituted the practice of "looping", in which prekindergarten teachers follow children to kindergarten and, in some cases, to the first grade. Through this practice, teachers develop a richer knowledge of the children's abilities and development and continuity in teacher and child relationships is supported.

FULL-SCHOOL-DAY KINDERGARTEN ALLOWS TEACHERS TO MORE EASILY PACE INSTRUCTION ACCORDING TO CHILDREN'S INDIVIDUAL NEEDS, EXPLORE INSTRUCTIONAL TOPICS IN DEPTH, DEVELOP CLOSE PARENT-TEACHER RELATIONSHIPS, AND ACCOMMODATE MORE TEACHER-DIRECTED INDIVIDUAL WORK WITH STUDENTS.

Full-school-day programs have been promoted as enhancing instruction and learning in kindergarten (Fromberg, 1995; Rothenberg, 1995). Research indicates that in full-school-day programs, children spend more time engaged in self-directed, independent learning and dramatic play. Children experience less frustration since there is more time for them to develop their interests, and science, social studies, art, music, and physical education are included more often than in half-day programs (Elicker & Mathur, 1997; Synder & Hoffman, 2001). Also, full-school-day kindergarten allows teachers to more easily pace instruction according to children's individual needs, explore instructional topics in depth, develop close parent-teacher relationships, and accommodate more teacher-directed individual work with students (Evansville-Vanderburgh, 1988; Cryan, Sheehan, Wiechel, & Bandy-Hedden, 1992; Elicker & Mathur, 1997). It is not the mere increase in hours that leads to the positive benefits of full-school-day kindergarten. It is what children experience during the day--an educational environment with appropriate curriculum and teaching practices informed by research--that promotes young children's exploration and learning (Cryan et al, 1992).

RECENT RESEARCH REVIEWS CONCLUDE THAT FULL-SCHOOL-DAY KINDERGARTEN IS ADVANTAGEOUS FOR ALL CHILDREN, NOT JUST CHILDREN FROM FAMILIES WITH LOW INCOMES.

Earlier research reviews indicated positive effects of full-school-day kindergarten programs on children's learning and achievement, especially for children from low-income families (Puleo, 1988; Karweit, 1989; Housden & Kam, 1992). Recent reviews conclude that full-school day kindergarten is advantageous for all children, not just children from families with low-incomes (Fusaro, 1997: Clark and Kirk, 2000). Participation in full-school-day kindergarten, as compared to half-day kindergarten, results in higher academic achievement in kindergarten, especially in reading and math, and promotes good relationships with peers and teachers (see Table 3 for a research summary). Studies also indicate that children in full-school-day programs had higher attendance rates and more satisfied parents, as well as long-term, positive effects such as fewer grade retentions and higher reading and math achievement in the early school years.

FULL-SCHOOL-DAY KINDERGARTEN HAS PRACTICAL ADVANTAGES FOR FAMILIES.

Beyond the educational benefits to children, full-school-day kindergarten has practical advantages for families. Consider the following facts: 1) in 1998, women comprised 46 percent of the workforce; 2) 60 percent of mothers with children under six years of age worked in 2000; 3) 57 percent of families with children under six in 2000 were dual-income; and 4) 27 percent of families in 1998 were single parents (Fullerton, 1999; U.S. Bureau of Labor Statistics, 2001; U.S. Census Bureau, 1998). With half-day kindergarten programs, arrangements for afternoon care are still needed for children in working families. Even though children in full-day programs need after-school care, since the typical work day ends after the traditional full-school day, full-school-day kindergarten provides more support to working families than part-day programs (Capizzano & Adams, 2000; Capizzano, Trout, & Adams, 2000).[17] Children are partially relieved of the stress involved in moving from program to program throughout the day. Moreover, full-school-day kindergarten provides children with a high-quality, educational experience that lower-to-middle class families are unlikely to be able to afford in the private (for profit and non-profit) early education/child-care market.[18]

During the eighties, 56 percent of children participating in research on half- versus full-day kindergarten in Ohio spent the remainder of their days in another child care program outside the home[19] (Sheehan, 1988). Today, across the nation this percentage is likely even higher. Considering that the quality of care in too many child-care programs and family child-care settings is mediocre (Helburn, 1995; Kontos, Howes, Shinn, & Galinsky, 1995), the option of spending a full-school-day in an enriching, educational kindergarten may better serve children. Moreover, time spent in poor-to-mediocre programs after a half-

[17] Options of a free full-day program or full-day programs instituting a sliding fee scale based on income would be more affordable for working families than half-day programs. Sandra Feldman, president of the American Federation of Teachers (AFT), has proposed such an arrangement.

[18] It is recognized that any effort to implement full-day kindergarten must also include efforts to ensure that the full-day program is truly a high-quality, educational experience for children. It is also understood that offering programs in public schools does not automatically guarantee a quality program.

[19] Cryan, Sheehan, Wiechel, & Bandy-Hedden (1992) also point out that this circumstance may result in an under-estimation of the effects of full-school-day kindergarten in their research. This may be true for a substantial amount of research conducted on full- and half-day kindergarten programs.

day in kindergarten might stagnate or diminish the gains made in the kindergarten educational experience. Thus, parents should have the option of choosing full-school-day kindergarten for their children to attend in their schools.

THE MOVEMENT FOR FULL-SCHOOL-DAY KINDERGARTEN WAS SUCCESSFUL IN NEW MEXICO.

Over the past few years, legislation has been proposed to establish or expand full-school-day kindergarten in Colorado, Maryland, New Jersey, New Mexico, Oklahoma, Virginia, and Washington. While some efforts met with limited success, the movement for full-school-day kindergarten was successful in New Mexico. In 2000, full-school-day kindergarten legislation was passed by the legislature (House vote 63-4 and Senate vote 28-8), and was signed into law by Governor Gary Johnson. Success of this initiative is attributed to Think New Mexico, a non-profit, bi-partisan, solution-oriented think tank.[20] Think New Mexico's advocacy for full-school-day kindergarten did not end with passing the legislation, but continues with advocating for the full implementation of the program. In New Mexico, three important issues arose in the effort to establish full-school-day kindergarten: funding of programs, recruiting and retaining qualified teachers, and lack of classroom space. These issues will be at the core of any effort to expand and improve access to and provision of kindergarten. (See Appendix A for lessons learned from Think New Mexico's successful campaign for full-school-day kindergarten.)

THREE IMPORTANT ISSUES AROSE IN THE EFFORT TO ESTABLISH FULL-SCHOOL-DAY KINDERGARTENS: FUNDING OF PROGRAMS, RECRUITING AND RETAINING QUALIFIED TEACHERS, AND LACK OF CLASSROOM SPACE.

Recommendations for Research

KINDERGARTEN IS A TOPIC RIPE FOR RESEARCH AND POLICY ACTION.

Kindergarten is a topic ripe for research and for policy action. Ideas for further examination include:

- Across the States, what percentage of programs are full-school day or half-day?
- How do school district characteristics (e.g., urban, suburban, or rural; district wealth) relate to the implementation of half-day or full-school-day programs?
- Do different populations of children (e.g., prior preschool or child care experience; socio-economic status; race-ethnicity) attend half-day and full-school-day programs?

[20] A forthcoming case-study by Anthony Raden will examine the evolution and achievements of Think New Mexico's full-school-day kindergarten movement.

If so, how do these factors influence children's adjustment and development in kindergarten and beyond?

EVALUATIONS SHOWING THE EFFECTIVENESS OF SPECIFIC KINDERGARTEN PRACTICES IN PROMOTING CHILD LEARNING AND DEVELOPMENT ARE NEEDED.

Evaluations showing the effectiveness of specific kindergarten practices in promoting child learning and development are needed:

- How do curricula differ between full-school-day and half-day programs?
- How can local schools be supported to design appropriate curricula and instruction practices that best serve the children's development and fulfill local needs?
- What are the practices of States, school districts, or schools in assessing individual children's growth and in assessing the impact of their kindergarten programs? What policies and rationale are needed to develop appropriate assessment practices?
- How are children with disabilities being served in public and private kindergartens? What are the special education issues in kindergarten?
- How are English Language Learners being served? What is the extent of dual-language, bilingual, or native language only (e.g., Spanish) classes?

THE RELATIONSHIP BETWEEN PREKINDERGARTEN AND KINDERGARTEN PROGRAMS, BOTH PUBLIC AND PRIVATE, IS AN AREA OF INCREASING IMPORTANCE.

The relationship between prekindergarten and kindergarten programs, both public and private, is an area of increasing importance:

- Do the purposes of prekindergarten and kindergarten overlap? What are their appropriate roles?
- Are there established partnerships and collaborations between prekindergarten and kindergarten programs to ease children's transitions? What practices are effective?
- Is there movement of teachers between kindergarten and prekindergarten programs? Is there competition for teachers between these programs?

Questions surrounding teacher preparation are:

- What are the characteristics of qualified kindergarten teachers compared to the other school grades and to early education programs?
- Do teacher credentials/qualifications vary by program type (half- and full-school-day) or auspice (public or private)? If

so, how do these influence children's cognitive and social development?

RESEARCH IS ALSO NEEDED TO UNDERSTAND EFFORTS TO INSTITUTE FULL-SCHOOL-DAY KINDERGARTEN.

Research is also needed to understand efforts to institute full-school-day kindergarten:

- How are States, school districts, and schools funding full-school-day kindergarten? What are the alternatives to charging parent fees[21]? What are the financial issues?
- Are there trade-offs in implementing full-day kindergarten? Do school districts cut other worthy programs to provide funding for full-day kindergarten?
- What advocacy strategies have been successful in promoting full-school-day kindergarten as a priority for State or local policy action?
- What policies stimulate full-school-day kindergarten? Does lowering the compulsory school entrance age or establishing voluntary, full-school-day prekindergarten encourage implementation of full-school-day kindergarten?

Recommendations for State Action

BECAUSE KINDERGARTEN POLICIES NOW DIFFER FROM THE REST OF THE PUBLIC EDUCATION SYSTEM, KINDERGARTEN-SPECIFIC INFORMATION IS NEEDED.

Information is routinely collected on kindergarten as part of the public education system. However, this information is embedded in K-3rd, K-6th, or K-8th questions. As a result, little available information is specific to kindergarten, even though kindergarten occupies a unique place in the public education system. Because kindergarten policies now differ from the rest of the public education system (i.e., length of school day, assessment practices, and compulsory attendance), kindergarten-specific information is needed. As kindergarten policies align themselves with grades 1-12, special attention may no longer be necessary. State Departments of Education should:

- Designate a person or contact office for kindergarten information, so that researchers receive consistent information on kindergarten policies and practices at the State and local level.

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[21] School districts in Arizona, Colorado, Delaware, Indiana, Massachusetts, Oregon, and Washington are allowed to charge parent fees (Unpublished data collected this year by NAEYC through a posting on the NAECS/SDE list-serve and following up with individual State Departments of Education and NAEYC State public policy chairs).

- Assess their data collection policies on kindergarten to collect appropriate data. Data should be collected not only on enrollment, but should also provide information on the distinction between program type (half- or full-school-day), hours served, qualifications of teachers, entrance ages, and assessment practices.
- Assess the relationship between State policy and school district and individual school practices. This information will be useful in informing future kindergarten policy.
- Consider kindergarten policies that better align the basic structural requirements of kindergarten, such as length of school day, to those of the subsequent school years and to preschool programs.
- Pay particular attention to equity issues, ensuring that high-quality kindergarten programs are available to all children within the State.

A NATIONAL PERSPECTIVE ON KINDERGARTEN PROGRAMS CANNOT BE FORMED WITH EXISTING DATA SOURCES.

Recommendations for Federal Action

A national perspective on kindergarten programs cannot be formed with existing data sources. Additional policy analyses and research must be conducted to understand this transition point in children's educational experiences and to formulate appropriate kindergarten policies. Recommendations for federal action include:

- The National Center for Education Statistics should institute new methods of data collection for kindergarten. In national databases such as the School and Staffing Survey or Common Core of Data, kindergarten is typically included in questions concerning grades K-6. Distinctions between half- and full-school-day programs are rarely made.
- Federal incentives for States to expand or establish full-school-day kindergarten programs should be considered, similar to federal incentives for States to expand or establish prekindergarten programs.

Conclusion

Publicly supported kindergarten is over 100 years old, but much work is still needed. The lack of accurate information at national and State levels obscures the extent of children's access to kindergarten across the States. A child's kindergarten

EQUITY CONSIDERATIONS ARE ABSENT FROM CONSIDERATIONS OF THE PROVISION OF KINDERGARTEN.

INCLUDING AND FOCUSING ON KINDERGARTEN AS PART OF THE PROMOTION OF UNIVERSAL, VOLUNTARY PREKINDERGARTEN ENSURES A CHILD'S RIGHT TO EQUAL EDUCATIONAL OPPORTUNITY.

experience depends on the State and school district in which a child resides, as well as the school a child attends. The option to attend full-school-day kindergarten is not readily available to all children. Equity considerations, which are being discussed in recent court cases regarding prekindergarten, are absent from considerations of the provision of kindergarten. Kindergarten policies and practices must be better articulated and aligned with those of grades 1-12, as well as preschool policies and practices. Including and focusing on kindergarten as part of the promotion of universal, voluntary prekindergarten ensures a child's right to equal educational opportunity.

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Table 1: The Status of Kindergarten in the United States

This table includes information about requirements for public school districts to provide half and/or full-school-day programs, the length of the Kindergarten school day, attendance requirements, kindergarten entrance age, the age of compulsory school attendance, the number of children served in the public school Kindergarten programs, and the percentage of eligible Kindergarten children served in public school programs. Multiple sources were used to gather data.

KEY

"---"- No State or Local District Policy
LEA-Local Education Agency
N/A- Not Available
CCSSO-Chief Council of School State Officers
NCCP-National Center for Children in Poverty
ECS- Education Commission of the States
NCES-National Center for Education Statistics
FCD-Foundation for Child Development

State*	Kindergarten Program (school districts are required to offer)					Attendance Requirement			Kindergarten Entrance Age	Compulsory Education Entrance Age	Length of School Day (hours)		Number of Children Served Public School Kindergarten 1998-1999	Percentage of Eligible Kindergarten Children Served In Public Schools*****
	CCSSO**			NCCP***		CCSSO		NCCP***	ECS****	ECS	CCSSO		NCES	FCD
	Half Day	And /Or	Full Day	Half Day	Full Day	Half Day	Full Day				Half Day	Full Day		
Alabama	No		Yes	No	Yes	N/A	Yes[1]	No	5 on or before 9/1	7	---	6	58,055	100%
Alaska	---	---	---	**Yes**	No	---	---	**No**	5 on or before 8/15	7	<4	>=4	9,838	92%
Arizona	Yes		No	Yes	No	**Yes**	N/A	**No**	5 before 9/1	6	2	---	65,312	114%
Arkansas	No		Yes	No	Yes	N/A	**Yes**	**No**	5 on or before 9/15	5	---	6	34,120	100%
California	Yes		No	Yes	No	No	N/A	No	5 on or before 12/2	6	3.3	---	459,781	100%
Colorado	---	---	---	---[6]	---	---	---	---[6]	LEA option	7	---	---	50,859	100%
Connecticut	Yes		No	Yes	No	**No**	N/A	**Yes**	5 by 1/1	7	---	---	42,500	98%
Delaware	Yes		No	Yes	No	Yes	N/A	Yes	5 on or before 8/31	5	2.5	---	8,025	84%
Florida	**No**		**Yes**	**Yes**	**No**	N/A	Yes	Yes	5 by 9/1	6	---	---	174,470	104%
Georgia	No		Yes	No	Yes	N/A	No	No	5 by 9/1	7	---	4.5	112,287	116%
Hawaii	No		Yes	No	Yes	N/A	No	No	5 by 12/31	6	6	6	15,019	92%
Idaho	---	---	---	**Yes**	**No**	---	---	**No**	5 by 9/1	7	2.5	4	17,318	101%
Illinois	Yes	or	**Yes**	Yes	**No**	No	No	No	5 on or before 9/1	7	2	4	150,953	90%
Indiana	Yes		No	Yes	No	No	N/A	No	5 by 6/1	7	2.5	---	71,974	89%
Iowa	Yes	or	**Yes**	Yes	**No**	No	No	No	5 on or before 9/15	6	---	---	35,772	88%
Kansas	---	---	---	---	---	---	---	---	5 on or before 8/31	7	2.5	5	31,279	80%
Kentucky	Yes		No	Yes	No	No	N/A	No	5 on or before 10/1	6	3	6	46,900	90%
Louisiana	No		Yes	No	Yes	N/A	No	No	5 by 9/30	7	---	6	58,922	83%
Maine	---	---	---	**Yes**	**No**	---	---	**No**	5 on or before 10/15	7	2.5	2.5	14,698	82%
Maryland	Yes		No	Yes	No	Yes	N/A	Yes	5 by 12/31	5	---	---	57,813	84%
Massachusetts	Yes		No	Yes	No	No	N/A	No	LEA option	6	---	---	71,390	91%
Michigan	---	---	---	**Yes**	**No**	---	---	**No**	5 on or before 12/1	6	---	---	131,021	93%
Minnesota	Yes	or	**Yes**	Yes	**No**	No	No	No	5 by 9/1	7	---	---	60,876	87%
Mississippi	No		Yes	No	Yes	N/A	No	No	5 on or before 9/1	6	---	5.5	39,509	96%
Missouri	Yes	or	**Yes**	Yes	**No**	**No**	**No**	**Yes**	5 as of 7/1	7	---	3-7	67,335	89%
Montana	Yes		No	Yes	No	No	No	No	5 on or before 9/10	5	7		10,848	84%

State*	Kindergarten Program (School districts are required to offer)					Attendance Requirement			Kindergarten Entrance Age	Compulsory Education Entrance Age	Length of School Day (hours)		Number of Children Served Public School Kindergarten 1998-1999	Percentage of Eligible Kindergarten Children Served In Public Schools******
	CCSSO**			NCCP***		CCSSO		NCCP****	ECS*****	ECS	CCSSO		NCES	FCD
	Half Day	And /Or	Full Day	Half Day	Full Day	Half Day	Full Day				Half Day	Full Day		
Nebraska	Requires 400hrs			Yes	No	No	N/A	No	5 on or before 10/15		5	7	21,145	84%
Nevada	Yes		No	Yes	No	**No**	N/A	**Yes**	5 by 9/30	7	---	2	23,986	135%
New Hampshire	---	---	---	---	---	---	---	---	LEA option	6	2.5	---	8,831	53%
New Jersey	---	---	---	**Yes**	**No**	---	---	**No**	LEA option	6	2.5	---	90,689	89%
New Mexico	Yes		No	Yes	No	**Yes**	N/A	**No**	5 by 9/1	5	2.5	---	23,759	90%
New York	---	---	---	**Yes**	**No**	---	---	**No**	5 on or before 12/1	6	2.5	---	202,894	84%
North Carolina	**No**		**Yes**	**Yes**	**No**	N/A	No	No	5 on or before 10/16	5	7		102,603	116%
North Dakota	Yes	and	**Yes**	Yes	**No**	No	No	No	5 as of 8/31	7	2.75	5.5	7,917	78%
Ohio	Yes	or	**Yes**	Yes	**No**	Yes	Yes	Yes	5 on or before 9/30	6	2.5	---	134,949	85%
Oklahoma	Yes		No	Yes	No	Yes	N/A	Yes	5 on or before 9/1	5	2.5	6	44,664	93%
Oregon	Yes		No	Yes	No	No	N/A	No	5 on or before 9/1	7	---	---	37,530	90%
Pennsylvania	Yes		No	Yes	No	No	N/A	No	LEA Option	8	2.5	5	126,155	79%
Rhode Island	Yes		No	Yes	No	Yes	N/A	Yes	5 on or before 12/31	6	2.5	5	10,907	84%
South Carolina	No		Yes	No	Yes	N/A	Yes	Yes	5 on or before 9/1	5	2.5	5	47,160	93%
South Dakota	Yes	and	**Yes**	Yes	**No**	No	No	No	5 on or before 9/1	6	See[4]		9,495	81%
Tennessee	Yes		No	Yes	No	Yes	N/A	Yes	5 on or before 9/30	7	4	4	71,870	108%
Texas	Yes	and	**Yes**	Yes	**No**	No	No	No	5 on or before 9/1	6	---	7	290,432	103%
Utah	Yes		No	Yes	No	**Yes**	N/A	**No**	5 on or before 9/2	6	---	---	34,529	98%
Vermont	Yes	and	**Yes**	Yes	**No**	No	No	No	5 on or before 1/1	7	---	---	6,976	82%
Virginia	Yes	and	**Yes**	Yes	**No**	Yes	Yes	Yes	5 on or before 9/30	5	---	5.5	84,154	98%
Washington	---	---	---	---	---	---	---	---[7]	5 on or before 8/31	8	---	4	71,323	95%
West Virginia	No		Yes	No	Yes	N/A	**Yes**	**No**	5 prior to 9/1	6	---	5.25	21,821	96%
Wisconsin	Yes		No	Yes	No	No	N/A	No	5 on or before 9/1	6	See[5]		59,611	79%
Wyoming	Yes		No	Yes	No	No	N/A	No	5 on or before 9/15	7	---	5	6,383	80%

* States in which there are differences between CCSSO and NCCP data are in bold. Differences occur in program requirement and/or the attendance requirement data. For example, CCSSO data indicate that there is no State kindergarten policy for program requirements but NCCP data indicate that half-day programs are required. NCCP data for Illinois State that only half-day programs are required to be offered, while CCSSO data State that half-day or full-school-day programs are required. For Arizona, CCSSO data State that attendance is required while NCCP does not.

**Data are from Key State Education Policies on K-12 Education, 2000, a publication of the Chief Council of School State Officers.

***Data are from Map and Track: State Initiatives for Young Children and Families, 2000, a publication of the National Center for Children in Poverty.

****Collected data on kindergarten attendance did not make the distinction between half- and full-day programs.

***** Data are from the Education Commission of the States website, specifically: State Notes: Kindergarten State Characteristics, March 2000.

******Calculated using 2001 Census Data estimates of the 1999 five-year-old population by State and the 1998-1999 NCES data on the number of Kindergarten children served in public school programs by State (Overview of Public Elementary and Secondary Schools and Districts: School Year 1998-1999). Since both data sources are estimations and the NCES data includes children younger or older than five years who attend Kindergarten, some percentages total over 100%.

[1] In Alabama, student attendance is only required if the student is enrolled. [2] Montana has an annual aggregated hours requirement.

[3] North Carolina requires 1,000 hours of Kindergarten per school year. [4] South Dakota has no minimum hourly requirement.

[5] Wisconsin has no minimum hourly requirement. [6] In Colorado, State funding is available for half-day Kindergarten and all school districts provide half-day programs, even though it is not a requirement. Kindergarten attendance is voluntary. [7] In Washington, kindergarten attendance is not required.

Table 2: Differences between State Policy and School District and Individual School Practice

State*	Kindergarten State Policy CCSSO	Kindergarten State Policy NCCP	Number of Children Enrolled In Kindergarten Programs State Department of Education				Number of School Districts and Schools Offering Kindergarten Programs State Department of Education				
	School District Requirement	School District Requirement	Half-Day	Full-Day	Alternate Full-school-day	Extended Day	Half-Day	Full-Day	Alternate Full-school-day	Extended-Day	Both Half & Full-school-day
MO[1]	Half or Full-school-day Programs	Half-day programs	13,903	49,731	N/A**	N/A	14 districts 102 schools	475 districts 905 schools	N/A	N/A	33 districts 127 schools
IL[2]	Half or Full-school-day Programs	Half-day programs	78,145	68,890	523	N/A	265 districts 883 schools	500 districts 1,138 schools	9 districts 9 schools	N/A	117 districts 249 schools
KS[3]	No set State Policy	No Set State Policy	21,421	9,534	430	N/A	520 schools	238 schools	26 schools	N/A	N/A
CT[4]	Half-day Programs	Half-day Programs	21,119	16,266	N/A	4,185	120 districts 335 schools	70 districts 305 schools	N/A	42 districts 70 schools	58 districts 102 schools

*All data for the 2000-2001 school year. ** N/A means "not applicable."

[1]Data from the Early Childhood Education Section of the Missouri Department of Elementary and Secondary Education.

[2]Data from the Illinois State Board of Education, Research and Policy.

[3]Data from the Kansas State Department of Education, Planning and Research. In Kansas over the past five years there has been a gradual increase in full-school-day programs and a decrease in half-day programs since in the 1996-1997 school year only 152 schools offered full-school-day, every-day kindergarten and 567 schools offered half-day, every-day programs.

[4]Data from the Connecticut State Department of Education, Division of Grants Management. Half- and full-school-day combinations mean either half- and full-school-day or half-and extended-day.

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Table 3: Summary of Recent Research Comparing Full-school-day (FD) and Half-Day (HD) Kindergarten Programs*

STUDY	DESIGN SAMPLE	MEASURES	EFFECTS OF FULL-SCHOOL-DAY
Gullo (2000)	Longitudinal study of 974 second graders from a large Midwestern school district (730 were in FD, 244 were in HD programs)	1. Iowa Test of Basic Skills (ITBS) 2. Grade Retention (1st three years) 3. Special Education (1st three years) 4. Attendance records	FD higher standard scores-ITBS-Reading FD higher standard scores- ITBS-Math FD less likely to be retained No differences in special ed. referrals FD higher attendance
Wang & Johnstone (1999)	Four pre-post test studies of children in FD & HD programs in a Texas school district. n= Full-school-day / Half-Day / Concept 308 / 148 / Language 412 / 143 / Math 378 / 121 / Literacy 198 / 51 / Social	1. IPT Oral Language Development 2. Woodcock-McGrew Werder Mini-Battery of Achievement -Math 3. Observation Survey of Early Literacy Achievement 4. Report Card Social/Emotional Development Checklist	At pre FD had higher scores and at post test FD had greater gains (raw mean scores) across the year for the language, math, and early literacy measures. On the social/emotional report checklist, FD made greater gains in a better behavior composite score than HD (there were no differences at pre-test)
Elicker & Mathur (1997)	Program evaluation of a two-year pilot kindergarten program collecting outcome and process data. Subjects were 179 kindergartners (69 were FD, 110 were HD) from a middle-class Midwestern community.	1. Developmental Indicators for the Assessment of Learning-Revised (DIAL-R), (Spring of each year) 2. Academic Report Cards 3. Early Childhood Classroom Observation System (ECCOS) 4. Teacher Interviews 5. Parent Surveys 6. 1st Grade Reading Readiness Ratings	HD slightly higher work habit score on sub-test of DIAL-R FD showed greater progress on report cards for literacy, math, general learning skills, & social skills FD & HD spent the greatest amount of time in large-group, teacher-directed activities. (27% FD, 47% HD) FD spent more time in child-initiated activities, teacher-directed individual work, & free play. FD displayed a slightly higher proportion of positive affect and lower levels of neutral affect. FD spent more time actively engaged, HD spent more time listening. Teachers feel FD: eases transition to 1st grade, more time for free choice activities, more time to adjust instruction at appropriate level for individual children, more time develop child & parent relationships, more time for instruction planning, less frustrating for children since there is more time to develop their interests. Parents feel FD: more time to explore & learn, better teacher-child relationships, positively influences social development. FD higher reading readiness scores
Cryan, Sheehan, Wiechel, & Bandy-Hedden (1992)	Statewide retrospective study of 8,290 kindergartners in 27 school districts and a longitudinal study of 5,716 (divided in 2 cohorts) kindergartners from 27 and 32 school districts.	1. Hahnemann Elementary School Behavior Rating Scale	FD had higher ratings for the following positive behaviors: Originality Independent Learning Classroom Involvement Productivity with Peers (react positively to & work well with) Approach to Teacher FD had lower ratings for the following negative behaviors: Failure/anxiety Unreflectiveness Holding Back-Withdrawn
Sheehan, Cryan, Wiechel, Bandy (1991)	Statewide retrospective study of 8,290 kindergartners in 27 school districts and a longitudinal study of 5,716 (divided in 2 cohorts) kindergartners from 27 and 32 school districts	1. Metropolitan Readiness Test 2. Metropolitan Achievement Test	FD had positive effects into 1st and 3rd grade FD had better standardized test performances (5-10 percentile-point difference over HD) FD less likely to be retained (17%-55% fewer retentions) and placed in Chapter 1 programs (50%-90% fewer placements)

* Only includes studies reported in published, peer-reviewed journals (excludes dissertations, conference reports, technical reports etc.) that compared full-school-day, everyday programs with half-day, everyday (excludes alternate day program findings).

Appendix A

Lessons from Think New Mexico's Full-School-Day Kindergarten Campaign: An Interview with Executive Director Fred Nathan

Lessons in Promoting Legislation

- MAKE A CLEAR CASE THAT FULL-SCHOOL-DAY KINDERGARTEN PROMOTES STUDENT ACHIEVEMENT.

Think New Mexico focused on the State's need for full-school-day kindergarten in its report, *Increasing Student Achievement in New Mexico: The Need for Universal Access to Full-school-day Kindergarten.* The report highlighted New Mexico's low national ranking in student achievement, compared New Mexico's provision of full-school-day kindergarten to national rates, presented the views of New Mexican parents and teachers, and specified the cost and benefits from full-school-day kindergarten. Most notably, it cited State-based research in a public school on the positive impact of full-school-day kindergarten, and showed that full-school-day kindergarten could successfully be implemented in New Mexico's public schools. Think New Mexico's account of the history of kindergarten revealed half-day kindergarten as a misnomer, pointing out that it involved only 2.5 hours a day. Further, the report noted that half-day kindergarten was not instituted to best serve the development of children, but was a result of historical circumstances and inaction. These points defused legislators' beliefs that, if half-day kindergarten worked for them when they were children, it was good enough for children today.

- ADDRESS THE FINANCIAL IMPACT OF IMPLEMENTING FULL-SCHOOL-DAY KINDERGARTEN AND DEMONSTRATE HOW FUNDING WILL BE OBTAINED.

In past efforts, concerns about how to finance full-school-day kindergarten led to inaction. Think New Mexico's report, *Setting Priorities*, created a specific plan for how New Mexico could finance full-school-day kindergarten. The plan did not require new funding streams or taxes or the expansion of government, but identified budget items that could be eliminated (professional service contracts, non-essential and duplicative boards and commissions) and identified savings when full-school-day programs are implemented instead of half-day (reduced transportation and special education costs). The report also established that the program would result in a high return on the investment, saving money for State government in the long run. A five-year-phase-in period helped to ease the immediate price-tag issue.

- BROADEN POLICYMAKERS' PERSPECTIVES OF WHO SUPPORTS FULL-SCHOOL DAY KINDERGARTEN.

Think New Mexico sought the endorsement of the business community; in particular, the Association of Commerce and Industry and the Hispano Chamber of Commerce. Fred Nathan traveled to communities throughout the State to talk with reporters and community members about the issues involved in full-school-day kindergarten, in order to raise public awareness of the pending legislation. As a result, the general public rallied to create a full-school-day kindergarten movement.

- ENGAGE THE MEDIA AS ALLIES.

Think New Mexico sent copies of their reports to every media outlet (small to large) and directly called many of the large media outlets in New Mexico such as newspapers, radio stations and television studios. The media responded to Think New Mexico's carefully prepared facts, figures, and case Statements by publishing numerous articles on the need for full-school-day kindergarten.

- FRAME THE PROGRAM AS VOLUNTARY AND AS PROMOTING PARENTAL CHOICE AMONG PROGRAM OPTIONS.

Allowing parents to voluntarily choose the option of sending their children to a full-school-day or half-day program successfully countered the idea that full-school-day kindergarten separated children from their families and led to the government raising children. The argument was that the current practice of supplying only half-day programs limited parental choice.

- SUSTAIN ADVOCACY DURING IMPLEMENTATION OF THE LEGISLATION.

Lack of classroom space is a serious issue in moving towards full-school-day kindergarten. According to a survey conducted by the New Mexico State Department of Education (SDE), 570 classrooms were needed Statewide to accommodate full-school-day kindergarten during the phase-in period. SDE estimated it would cost approximately $60 million dollars to build the necessary classrooms. Think New Mexico conducted its own survey and found that many school districts exaggerated their need and, in fact, only 169 classrooms with a cost of approximately $16 million were needed. In the 2000 session, the legislature passed a budget, which included $15 million to be spent over a period of two years to build the required kindergarten classrooms.

As part of the phase-in plan, the legislature determined that the first schools to receive funding for full-school-day kindergarten would be those schools that serve a high percentage of children from low-income families. Think New Mexico determined that the

State Board of Education's ranking system missed nine of the lowest-income schools across the State. Think New Mexico lobbied for funding for the nine schools. As a result, 486 students in those nine schools attended full-school-day kindergarten in 2000-2001.

New Mexico shares a national problem of a shortage of qualified kindergarten teachers. For many teachers, this is their first experience teaching kindergarten, and many do not have a specialized degree in early childhood education. In response, Think New Mexico hosted an all-expenses-paid-for conference for full-school-day kindergarten teachers. At the conference, early educators presented information on brain development, developmentally appropriate practice, detecting reading difficulties, and working with children from diverse families.

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